U.S. Application No.: 10/582,954

Response to OA dated October 6, 2010 Attorney Docket No.: ASA-5384

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A combustor for a regeneration type gas turbine, wherein combustion air in the gas turbine is compressed by a compressor and is heated using gas turbine exhaust gas in a regeneration heat exchanger, the combustor comprising:

a tubular combustor liner forming a combustion chamber;

an outer tube provided in an outer peripheral portion side of the combustor liner via a gap;

a first fuel injecting device provided in one end of the combustor liner and injecting a fuel and an air into the combustion chamber;

an a first air introduction hole introducing the combustion air guided from the gap with respect to the outer tube into the combustion chamber; and

a second air introduction hole having a guide tube extending from an inner wall of the tubular combustor liner into the combustion chamber; and

a second fuel injecting device provided in the outer tube at a position facing to the first air introduction hole and directly injecting the fuel into the combustion chamber from the first air introduction hole,

wherein gas is used as the fuel, and the second fuel injecting device has a fuel injection nozzle having an injection angle such that the fuel reaches an outer edge of an air jet from the first air introduction hole when the fuel goes to a center portion in a diametrical direction of the combustor liner along an air jet axis from said first air introduction hole, and

wherein the first air introduction hole and the second fuel injecting device are installed at a position so as to inject the combustion air and the gas fuel to a

U.S. Application No.: 10/582,954 Response to OA dated October 6, 2010

downstream side of a flame generated by the first fuel injecting device, a flow speed of the combustion air injected into the combustion chamber from the <u>first_air</u> introduction hole is made higher than a flow speed of a combustion gas around the <u>first_air</u> introduction hole, the combustion air injected from the <u>first_air</u> introduction hole is brought into contact with each other within the combustion chamber so as to form a circulation jet flow, the combustion air and the fuel introduced into the combustion chamber from the <u>first_air</u> introduction hole is mixed with the combustion gas so as to generate a lean air-fuel mixture, an oxidation reaction of the lean air-fuel mixture is started by the circulation jet flow, and a slow oxidation reaction is performed so as to depend on a diffusion of heat to the lean air-fuel mixture.

Attorney Docket No.: ASA-5384

- 2. (canceled).
- 3. (canceled).
- 4. (previously presented): A combustor according to claim 1, wherein the second fuel injecting device is provided so as to pass through a peripheral wall forming the combustion chamber.
- (previously presented): A combustor according to claim 1,
 wherein the second fuel injecting device is constituted by a plurality of fuel injecting devices, and

these plurality of fuel injecting devices are arranged such that the fuel and the air come into collision with each other near a center portion of the combustion chamber.

6. (previously presented): A combustor according to claim 1, wherein the second fuel injecting device is provided with a fuel injection nozzle near a center

U.S. Application No.: 10/582,954

Response to OA dated October 6, 2010 Attorney Docket No.: ASA-5384

portion of the combustion chamber, such that the fuel is positioned in an outer side of a spray flow of the air.

- 7. (previously presented): A combustor according to claim 1, wherein the second fuel injecting device is provided with a guide tube guiding the fuel and the air to a center portion of the combustion chamber, in a peripheral wall forming the combustion chamber, and the guide tube protrudes into the combustion chamber.
- 8. (previously presented): A combustor according to claim 1, wherein a third fuel injecting device generating a circulation jet flow of an air-fuel mixture is provided near a terminal end portion of a reaction region within the combustion chamber.
- 9. (canceled).